

**REMARKS**

Applicants respectfully request reconsideration of this application.

The Office Action rejects Claims 1, 5-8, 10-11, 15-18, and 20-21 under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Carlson. Claims 2 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Carlson and further in view of Day. Claims 3-4, 9, 13, 14, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Li in view of Carlson and further in view of Gornushkin. Applicants respectfully traverse all of the currently pending rejections.

Applicants respectfully resubmit that Li does not teach or suggest comparing the obtained multi-order spectrum to the multi-order spectra for known materials and identifying the sample based on a correlation between the multi-order spectrum from the sample and the multi-order spectra of known materials nor does Carlson teach or suggest obtaining a multi-order spectrum from a sample of an unknown material.

Contrary to the Examiner's assertion, it would not have been obvious to modify Li's method with Carlson's protein molecule fingerprint comparison method to result in the present method and systems of comparing the obtained multi-order spectrum to the multi-order spectra for known materials and identifying the sample based on a correlation between the multi-order spectrum from the sample and the multi-order spectra of known materials. It would not have been obvious, because Li teaches several piecemeal, pixel-by-pixel identification methods for the individual spectra for each specific element/material (e.g., A, T, G, C) within the multi-order spectrum (*see*, page 8, ¶90 – page 9, ¶102), not comparing an obtained multi-order spectrum with known multi-order spectra. As a result, not only is there no teaching or suggestion in Li of comparing an obtained multi-order spectrum to the multi-order spectra of known materials, but the

individual identification of element/material spectra methods disclosed in Li actually teach away from making such a comparison. Therefore, there is no teaching or suggestion in Li that would motivate one of skill in the art to combine Li with Carlson as asserted by the Examiner. Accordingly, at least based on these distinctions, and since the references either alone or in combination do not teach the recited combination of features, Applicants respectfully submit the pending claims are patentably distinguishable from the cited references, and a Notice of Allowance is respectfully requested.

Should the Examiner believe that any further action is necessary to place this application in better form for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

The Commissioner is hereby authorized to charge to Deposit Account No. 50-1165 (T2315-908017US01) any fees under 37 C.F.R. §§ 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby requested.

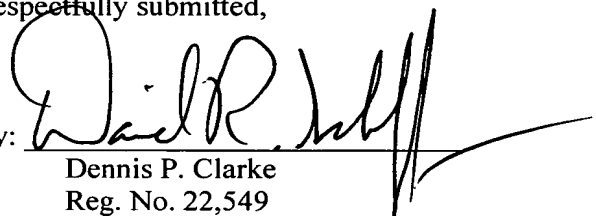
Date:

9/1/06

Miles & Stockbridge, P.C.  
1751 Pinnacle Drive  
Suite 500  
McLean, Virginia 22102-3833  
(703) 903-9000

Respectfully submitted,

By:



Dennis P. Clarke  
Reg. No. 22,549

David R. Schaffer  
Reg. No. 43,089